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Regional Scientific and Technical Organization's Role in the Telecommunication Complex Development of Krasnoyarsk Region

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*Regional scientific-technical organization plays an important role in the expansion of the sphere of information technologies in the economy of the Krasnoyarsk region. This paper deals with the aspects of interaction between the state and regional structures involved in the telecommunications business.**Keywords: information technologies, telecommunications providers, telecommunication services and systems.*

Роль региональной научно-технической организации в развитии телекоммуникационного комплекса Красноярского края

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*Региональная научно-техническая организация играет важную роль в расширении сферы информационных технологий в экономике Красноярского края. В данной статье рассматриваются аспекты взаимодействия между федеральными и региональными структурами, задействованными в телекоммуникационном бизнесе.**Ключевые слова: информационные технологии, провайдеры связи, телекоммуникационные сервисы и системы.*

The telecommunication complex of Krasnoyarsk Krai is one of the most developing economic sectors. It includes 254 telecommunications providers with 589 federal licenses for providing various services in 18 spheres: Internet access – 140 providers, data transfer – 98, local telecommunication – 79, cellular services – 5, TV broadcasting – 35, radio broadcasting – 34, cable TV – 40, mail service –

11, etc. According to the Federal State Statistics Service the volume of the telecommunication services provided in Krasnoyarsk Krai in 2013 increased by 4,3 % compared to the previous year and made 26,89 billion rubles against 25,789 billion rubles in 2012. For a good understanding of the scale of communication services requirement: Krasnoyarsk Krai is one of the largest regions in Russia, which comprises 61 municipal territories and 517 rural settlements located in the territory of 2,4 mln sq. km where about 3 million inhabitants live.

Special features of the Krai, such as the extended territory with various climatic zones, the big amount of remote settlements, low population density cause different levels of penetration of modern telecommunication services. While the central part of the region is equipped with wire telecommunication systems, northern areas have none of them. Access to such remote settlements is carried out by means of satellite channels that bring low quality and high costs with them. Despite of modern technologies development, in some cases presence and quality of telecommunication infrastructure are insufficient for providing of the telecommunication services meeting modern requirements. Infrastructure development is uneven; there are disproportions in level of availability of services for separate groups of the population and areas. Infrastructure development in remote and small locations is economically unattractive for telecommunication providers. Previous years some very demanded content resources appeared which increase this attractiveness and give the corresponding acceleration for introduction of new telecommunication systems and emergence of additional telecommunication services. Elements of remote trade, remote education and a telemedicine are also powerful drivers of development of modern infocommunication technologies. Thus the public sector also plays very important role. On the one hand, for state it is necessary to provide proper level of management with federal authorities and their structural divisions in the subjects of the Russian Federation. On the other hand, it is necessary to provide equal availability to receiving the government and municipal services to each inhabitant. It is impossible without modern telecommunications and interaction with the state information systems of various levels. For realization of these tasks the Government of Krasnoyarsk Krai successfully realizes a number of actions to form the electronic government systems in the territory.

The idea of creation and formation of the electronic government is directed to providing of the government services to citizens in a convenient alternative form, with application of progressive means and IT technologies.

According to the Decree of the President of the Russian Federation dated 7 May, 2012, No. 601 [1], by 2018 in Krasnoyarsk Krai it is necessary to achieve the following indicators: 70 % of the population should receive government services in electronic form, 90 % of inhabitants should be satisfied with the government services. Technically in Krasnoyarsk Krai the infrastructure of the electronic government is developed and functioning, it includes a set of the regional-centralized technical, program and departmental systems, such as:

- The protected network of data transfer uniting all executive authorities of Krasnoyarsk Krai;
- The Consolidated Register of Government and Municipal Services;
- Regional system of interdepartmental electronic interaction and rendering services in electronic form – “Yenisei – the Government Services” (“Yenisei-GU”) [2];
- The regional accredited certification authority of Electronic Signatures;
- The state and municipal services Portal of Krasnoyarsk Krai;
- Electronic document flow system;

- 28 departmental information systems working in an interdepartmental electronic interaction.

Regional system of interdepartmental electronic interaction “Yenisei-GU” is the core of the electronic government of Krasnoyarsk Krai. It allows to create inquiries to departments of various level – federal, regional, municipal. Interaction of experts and inquiry-and-answer data transfer is realized by means of the protected communication channels, including the use of the qualified electronic signature. According to the Resolution of the government of Krasnoyarsk Krai the Yenisei-GU system has the status of the State information system of Krasnoyarsk Krai.

The “Yenisei-GU” system and infrastructure systems of the electronic government cooperate with Federal System of Interdepartmental Electronic Interaction (SMEV). The representatives of all levels of local governments, including administrations of all rural settlements of Krasnoyarsk Krai have the regulated access to the infrastructure. Considering geographical extent of the region and unevenness of communication services coverage the organization of such access was one of the main problems of the electronic government formation. And the experts solved it thanks to the potential of the regional IT companies, telecommunications providers and the scientific and technical companies.

The expert groups on introduction of above-mentioned information technologies participated actively in development and introduction the main systems of the electronic government as well as auxiliary ones. Skills and abilities of regional experts allowed to localize, install and put into commercial operation software products and computing systems of leading global manufacturers. Satellite communication stations and antenna systems providing communication services and access to necessary information systems are installed all over Krasnoyarsk Krai. A number of the unique information systems allowing to solve effectively both registration and production and technological tasks in the public and municipal administration is developed and created by the specialists of the regional companies. Examples of such automated information system (AIS) are AIS “Targeted social assistance”, AIS “Medicine”, AIS “Archives”, AIS “Labour and employment”, AIS “Culture”, AIS “Architecture and construction”, AIS “Registry office”, AIS “Preschool child”, AIS “Web registry”, Integrated Urban Information Billing Systems “Sprint – HCS (Housing and communal services)” and “Sprint-Transport”, etc. These information systems are highly demanded by inhabitants of the region. For example, 462 814 inhabitants made an appointment to visit a doctor remotely by AIS “Web registry”. Electronic registration of payment in public transport is made in “Sprint-Transport” system. Monthly more than 7 million trips are registered. At registration of long-distance trips the GLONASS technologies are used.

The general statistics for 2013 in “Yenisei-GU” system is as follows:

- all executive authorities participating in the interdepartmental interaction are connected to the system – 638 users;
- 100 % access for all 517 local governments is organized (including access by means of the electronic government terminal devices – Infomats) – 1 654 users;
- 54 830 outgoing electronic requests were created, 49 318 answers were received.

With introduction of AIS “Preschool child” system developed in Krasnoyarsk Krai transparent and up-to-date information about the waiting list to kindergartens is available to parents on the Internet. Remote record to the waiting list to kindergarten through a regional portal of the government services and a network of the Multipurpose centers is possible. In 2013 automatic picking in preschools is made for the first time in the region. That reduced labor costs of specialists of boards of education in

8 times. Today all municipalities successfully work in system though earlier separated information systems prevented to make the complete picture with the situation with quantity of places and the queue movement in the preschools.

It is very important that AIS "Preschool child", as well as other introduced departmental information systems, functions not as a separately taken automated link but all of them are the components of the infrastructure of the electronic government of Krasnoyarsk Krai. Parents' applications are processed in the "Yenisei-GU" system; there is an automatic check of authenticity by means of electronic interdepartmental inquiries to the divisions of FMS and the Registry office.

Experiment of Krasnoyarsk Krai on introduction of socially significant information systems was reflected in the federal collection of the Expert center of the electronic state "The Best Practices of Regional Informatization". More than twenty IT companies and the communication organizations are brought in the federal Register "Honour Book".

For the high social importance the system was awarded the second degree diploma of the first all-Russia competition of projects of regional informatization "PROFESSIONAL IT" (Syktyvkar); and also the 1st place at the V all-Russia competition of IT projects "Electronic municipality-2013" (Yekaterinburg).

The government and municipal services Portal of Krasnoyarsk Krai (www.gosuslugi.krskstate.ru) is the important part for providing the government services to inhabitants of Krasnoyarsk Krai. The all-Russia Unified system of identification and authorization (ESIA) is used to access the Portal. It means that there is a common login and the password for accessing to the regional and federal portals. In the regional portal there is a simplified system of registration if a citizen plans to receive only regional and municipal services, it is quite enough of it.

In 2014 the service of Internet acquiring in the regional portal is planned to introduce for convenience of citizens. Thus, users will have a possibility to pay the state taxes for rendering of services in electronic form. And in this regard the citizens using electronic services have an attractive prospect. The Ministry of Economic Development of the Russian Federation plans to reduce twice since 2015 the size of the state duty for the services rendered in electronic form.

Modern IT technologies are applied also in a network of the Multipurpose centers (MPC). Today in Krasnoyarsk Krai 20 MPC divisions use the "Yenisei-GU" by means of the uniform information system "Yenisei- MPC ". 37 746 applications were created in 2013 by this system.

In MPC for convenience of citizens the electronic queue is introduced, the uniform regional call-center of the electronic government concerning receiving the government and municipal services (tel.8 800 200 3912) is operating. The call is free for locals. In 2014 opening of 7 more divisions of MPC is planned. Their activity will be based also on modern information technologies for operative and high-quality service to citizens in a one-window mode.

The program of the Government of Krasnoyarsk Krai on installation of the electronic government terminal devices – Infomats – allows to solve in a complex not only the problem of providing of the interdepartmental electronic interaction, but also to reduce a digital inequality in the region. All installed Infomats were produced in Krasnoyarsk Krai. Today 474 operating Infomats are available in all municipalities including rural settlements; they allow to keep the electronic register of services, to receive the government services and to render them by means of the protected communication channels, and also to have obligatory connection to federal system of interdepartmental electronic

interaction. It should be noted that access to official sites, portals of government services, a call to the uniform call-center of the electronic government on the basis of MPC of Krasnoyarsk Krai is free for citizens.

Thus, the necessary conditions for work with electronic government systems are provided to municipalities and rural councils by installation of the Infomats with the separate communication channels for Internet connection. All Infomats allow to make authorization of the citizens' appeals by means of the universal electronic card or the social card. They have the function of remote payment, including taxes, duties and fines. Since 2013 operative informing of the municipalities on the emergencies occurred in Krasnoyarsk Krai is made through a network of the Infomats. The cardiograms can be transferred from the municipal medical and obstetrical stations to the Uniform regional center of diagnostics and consultation by means of the voice menu of the Infomats. Krasnoyarsk Krai is unique among Russian subjects because of such developed network of the Infomats with wide applied functionality for the civil and municipal servants, inhabitants of the region, and for execution of the federal law of July 27, 2010 № 210-FZ "About the organization of providing the state and municipal services".

The willingness of experts to work with new technologies and population awareness are necessary for successful promotion and providing electronic government services also. For these purposes experts and designers of the region created the Internet portal of promoting the systems of the electronic government: www.24vcourse.ru. For the training of the specialists rendering the government and municipal services, monthly training practical works and seminars are organized, training video instructions are developed.

The State information system of web video conferences "Yenisei-Videomost" allows to hold methodical meetings on using of the electronic government systems and rendering of services in electronic form distantly for all areas of the region, including remote and northern. The 24-hour service of technical support is organized for operation of the electronic government systems. Continuous monitoring of an assessment of the quality of public services is carried out by the specialists of departments.

This is the infrastructure created by the Government of Krasnoyarsk Krai with the assistance of the regional companies. It allows inhabitants of the region to use telecommunications and to receive the government services of federal and regional levels electronically.

References

- [1] Decree of the President of the Russian Federation dated 7 May, 2012 No. 601 On Main Directions of Developing the System of Public Administration.
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